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(56) Documents cited
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(54) Improvements in golf clubs

(57) A hollow cast metal head (1) for a metal wood golf club has the hosel or socket for receiving the shaft (4) of the club, provided within a neck (2) projecting into the interior of the head proper. This places the centre of gravity of the club closer to the sole plate (3) and increases the hitting distance attainable with the club. The shaft may be received in a socket (6) or on a pin (not shown) at the sole plate.

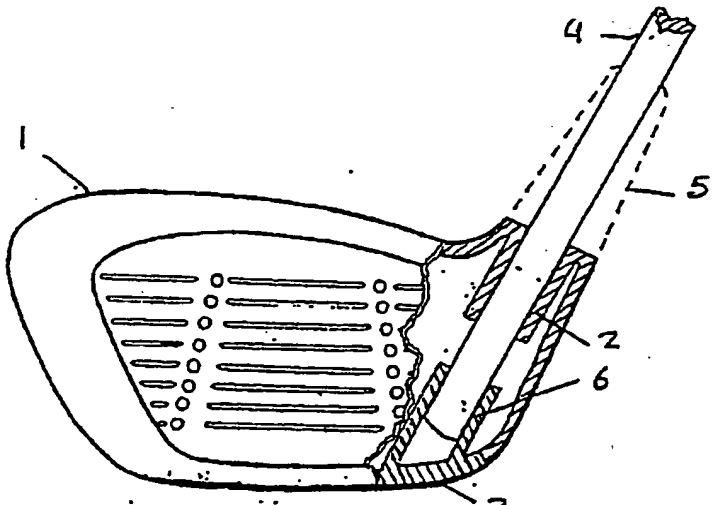

Fig.2

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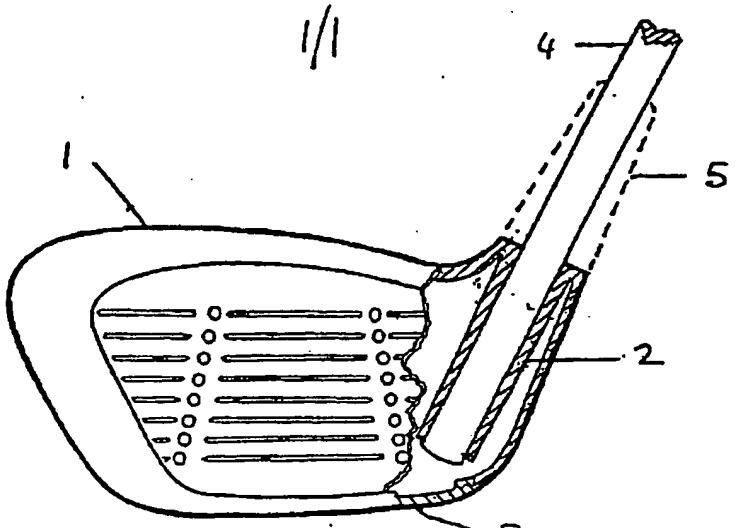

Fig. 1

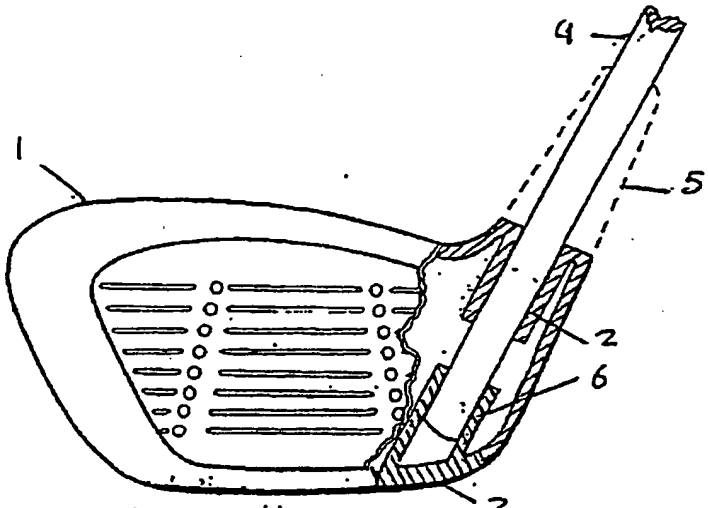

Fig. 2

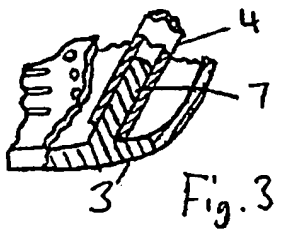

Fig. 3

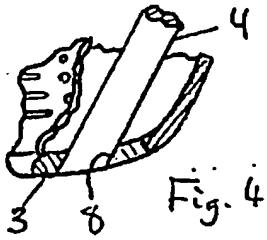

Fig. 4

IMPROVEMENTS IN GOLF CLUBS

DESCRIPTION

This invention relates to improvements in golf clubs and particularly in metal woods.

At present, metal woods have their hollow metal heads cast with the hosel or socket for the shaft, provided wholly within an elongate neck projecting outwards from the head proper. The shaft has its lower end terminating at the junction of the neck and the head proper.

This arrangement tends to space the centre of gravity of the club away from the sole thereof with a consequent limitation on the hitting distance attainable with the club.

An object of the invention is to move the centre of gravity of the club closer to the sole thereof and thereby increase the hitting distance attainable with the club.

According to the invention there is provided a metal wood golf club, wherein the lower end of the shaft terminates close to or at the sole plate of the head.

Embodiments of the invention will now be described, by way, of example, with reference to the accompanying drawings, in which:-

Fig. 1 shows the head and of a metal wood golf club having a hosel provided within a long internal neck;

Fig. 2 shows the head end of metal wood golf club having two mutually aligned internal hosels, one formed in the head proper and the other on the sole plate; and

Figs. 3 and 4 are detail views showing two modifications of the embodiment in Fig. 2.

Referring to Fig. 1, the hollow head proper is shown at 1 with a long integral neck 2 projecting into the interior of the head 1. A sole plate 3 is welded into an opening at the bottom of the head 1. A shaft 4 is shown received within the hosel formed in the neck 2. A plastics ferrule is shown at 5 for appearance sake.

In Fig. 2 a shorter internal neck 2 is shown integral with the head 1. Aligned with the neck 2 is an additional neck 6 integral with the sole plate 3 and the shaft 4 is received within the hosels in both necks 2 and 6.

In Fig. 3 the neck 6 in Fig. 2 is replaced by a peg 7 integral with the sole plate 3 and an open end of a tubular shaft 4 tightly receives the peg 7.

In Fig. 4 the neck 6 in Fig. 2 and the peg 7 in Fig. 3 are replaced by a hole 8 in the sole plate 3. The lower end of the shaft 4 is tightly received in the hole 8, shaped to the form of the profile of the sole plate 3 and welded in place.

In Figs. 2, 3 and 4 the neck 2 integral with the head 1 may not be completely internal but alternatively may extend either completely outwards or partly outwards and partly inwards.

In a conventional head of a metal wood golf club the lower end of the shaft is received within a hosel formed in an external neck which occupies substantially the span occupied by the ferrule 5 in Figs. 1 and 2. The shaft terminates at the junction of the head 1 proper and the external neck. By fixing the shaft so that its lower end terminates close to or at the sole plate 3 the centre of gravity of the club is placed nearer the sole plate.

This increases the hitting distance attainable with the club. The swinging weight of a club is obtained by balancing the club at a point on the shaft spaced about 10 inches or 25cm from the heel of the club and moving a weight along the grip end of the shaft. By moving the centre of gravity of the club nearer the sole plate the same swinging weight is achieved with less metal in the head. This creates a saving in material.

CLAIMS

1. A metal wood golf club, wherein the lower end of the shaft terminates close to or at the sole plate of the head.

2. A golf club according to claim 1, wherein the hosel or socket receiving the shaft, is provided within a neck projecting into the head and terminating close to the sole plate.

3. A golf club according to claim 1 wherein the shaft is received within a hosel formed in a neck integral with the head proper and is also secured at its lower end to the sole plate.

4. A golf club according to claim 3, wherein the sole plate has a second internal neck aligned with the first mentioned neck and providing a second hosel receiving the lower end of the shaft.

5. A golf club according to claim 3, wherein the sole plate has a peg aligned with the neck and received within an open lower end of the shaft.

6. A golf club according to claim 3, wherein the sole plate has a hole aligned with the neck and receiving the lower end of the shaft.

7. A metal wood golf club, substantially as herein before described with reference to Fig. 1 of the accompanying drawings.

8. A metal wood golf club, substantially as hereinbefore described with reference to Fig. 2 of the accompanying drawings.

9. A golf club according to claim 8 but modified substantially as hereinbefore described with reference to Fig. 3 of the accompanying drawings.

10. A golf club according to claim 8 but modified substantially as hereinbefore described with reference to Fig. 4 of the accompanying drawings.

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